謝光照博士

曾一航¹、李璟妤²、陳學文³

在外觀稍有歲月痕跡的大樓中,狹長 走廊一側有間略顯老舊的房間,房內堆疊 著各式文獻資料的書桌前,有位長者正埋 首分析著眼前各項數據。這空間裡散發著 特有氣息,有種彷彿能將時光暫時凝結的 靜謐感。而隨著我們這群後輩的到訪,魚 貫而入的腳步聲,瞬時將此靜謐感驅向了 長廊的遠方。桌前長者雖抬起頭來和藹地 應聲招呼,但不難看出,其思緒卻仍似停 駐在其案前資料上,一時難以完全抽離。 霎時,一種誤闖煩擾他人精神空間的歉疚 感不禁悄然而生,同時也自慚於缺乏其學 者大家的專心致志。眼前這位長者,就是 國內玉米研究領域的重要專家 — 謝光照博 士。

種苗臉譜

民國 73 年 1 月 23 日,原計畫至臺灣 省政府農林廳任職的謝光照博士,因緣際 會地改赴農業試驗所報到,身為澎湖人的 他,竟自此在臺灣本島與玉米結下一段不 解之緣。現今為農民所熟知的飼料玉米臺 農 1 號(目前更名為硬質玉米),為國內玉 米育種史上的重要里程碑,而該品種的登 場,正是謝博士利用春節前後期間,在宿

舍裡隻身伴著調查數據及泡麵果腹下所催 生的。在民國 80 年以後, 爲解決國內畜牧 養殖用飼料問題,其研究重心遂轉向青割 玉米品種之育成,並分別於民國83及86 年,先後推出青割玉米臺農2號及臺農3 號。在此期間,謝博士也踏上其博士班求 學之路,並師承於曾富生教授, 攻讀研究 國內重要玉米地方品種 — 臺南白玉米族 群。經多年鑽研及經驗積累,終在民國 91 年選育出高產且抗病蟲性佳的食用白玉米 臺農4號。隨後謝博士又將目光轉注到糯 性玉米選育相關領域,並於民國94年推出 俗稱「彩虹玉米」之新品種 — 黑糯玉米臺 農5號,其果穗除同時呈現出白、紫紅及 深紫色等多變外觀外,口感帶勁目皮薄香 甜,現為苗栗通霄地區之重要特色農作; 民國 102 年則完成白糯玉米臺農 6 號之育 成及命名。暮然回首, 近三十年的光陰轉 瞬即逝,然謝博士對於玉米改良育成依舊 充滿著熱忱與想望,念及國內推廣已久的 玉米臺農1號易因銹病導致產量下滑,遂 著手進行該品種之改良研究,最終於民國 106年育成克服該項缺點的高產品種 — 硬

2021.6 種苗科技專訊 No.113 24

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質玉米臺農7號。基於供應國內優質玉米 品種考量,種苗場目前正進行該品種試作 生產,藉此掌握其親本特性以穩定後端種 子供應。

回顧謝光照博士的研究經歷,宛若一 部臺灣玉米品種育成史的縮影。而在回望 過去的濾鏡中,那些舊時辛勞點滴已然褪 去苦澀,僅餘下博士莞爾細數著往事種種 的從容。何其有幸,能在這平凡午後,聆 聽著一段段不平凡的過往,並親身感受到 博士未竟夢想之重,著實啓益甚深。若我 們現正翻讀著的,是其職涯篇章末節,期 望謝博士能爲此段落下的終句是一「未 完,待續」。



圖 1. 農業試驗所玉米試驗田區一隅



圖 2. 謝光照博士簡介其玉米試驗概況

The Master Writing the Breeding History of Maize in Taiwan - Dr. Guang-Jauh Shieh

Yi-Hang Tseng¹, Ching-Yu Lee², and Hsueh-Wen Chen³

In the building with the traces of time, there is a slightly old room on one side of the long and narrow corridor. In the room, in front of the desk with many documents stacked, an elderly person is immersed in the analysis of various data in front of him. The space exudes a unique atmosphere, a sense of tranquility that seems to stop time temporarily. With the visit of our younger generations, the sound of footsteps filed into the room instantly drove out the tranquility sense to the far side of the corridor. Although the elder in front of the table raised his head and greeted kindly, it was not difficult to see that his thoughts still focus on the documents on the table, and it was difficult to completely withdraw from the situation for a while. Suddenly, we felt a pang of guilt quietly for intruding and disturbing his spiritual space. At the same time, we are also ashamed of lacking the concentration of a scholar like him. The elder in front of us is the

important expert in the field of maize researchDr. Guang-Jauh Shieh.

On January 23 in 1984, Dr. Guang-Jauh Shieh originally planned to hold a post in the Agriculture and Forestry Division of the Taiwan Provincial Government, but he finally took office in Taiwan Agricultural Research Institute, COA through serendipity. As a native of Penghu County, it is unexpectedly that there has been an indissoluble bond between maize and him since the moment in Taiwan. The feed corn variety "Tainung No. 1", which is now well-known to farmers, is an important milestone in the breeding history of maize in our country. Its appearance is based on that Dr. Shieh hardily sorts the data in his staff dormitory during Chinese New Year holidays and eats instant noodles to stop hungry. After 1991, in order to solve the fodder problem of domesticated livestock in Taiwan, the focus of his research is turned to the breeding of forage

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corn. Then, the new forage corn varieties

"Tainung No. 2" and "Tainung No. 3" are developed in 1994 and 1997, respectively. During this period, Dr. Shieh also embarked on the path towards his doctorate degree, and the dissertation director is professor Fu-Sheng Zeng. The topic of his study is the important native population - Tainan-white. After years of intensive research and experience accumulation, the white food corn variety

"Tainung No. 4" with high yield and good disease/insect resistance is finally developed in 2002. Later, Dr. Shieh turned his attention to the related fields of waxy corn breeding, and the new black waxy corn variety "Tainung No. 5", commonly known as "Rainbow Corn", is launched in 2005. The kernels per ear have different colors, such as white, purple red and dark purple at the same time. In addition, its taste is rubbery and sweet. So it is an important characteristic crop in the Tongxiao area of Miaoli county now. In 2013, the development of white waxy corn variety "Tainung No. 6" is also completed. In retrospect, almost thirty years have passed quickly. However, Dr. Shieh is still full of enthusiasm and desire for the improvement of maize breeding. Considering the disadvantage of the feed corn variety "Tainung No. 1"

that promoted for a long time in Taiwan, i.e., the yield of the variety could decline due to rust infection, he started to conduct related researches to improve the variety. Finally, the feed corn variety "Tainung No. 7" which overcomes the shortcoming is bred in 2017. In view of the supply of high quality maize variety to domestic use, the trial production is conducted by Taiwan Seed Improvement and Propagation Station, COA to understand the characteristics of the parental lines, and the downstream seed supply is therefore stabilized.

In review of the research career of Dr. Shieh, it seems like a microcosm of the breeding history of maize in Taiwan. Through the filter of the passed time, the bitterness of the toilsome work in the past has faded away. The only thing left is the calmness as he tells the past with a smile. How fortunate to be able to listen to the extraordinary past in this ordinary afternoon. It is also enlightening to feel the weight of his unfulfilled dream by ourselves. If what we are reading now is the last section in the chapter of his career, I hope that the final sentence in the last paragraph written by Dr. Shieh is "to be continued."



Fig. 1 Part of the maize trial farm in Taiwan Agricultural Research Institute, COA.



Fig. 2 Part of the maize trial farm in Taiwan Agricultural Research Institute, COA.